



# LOCAL COASTAL PROGRAM SEA LEVEL RISE ADAPTATION GRANT PROGRAM ANNOUNCEMENT

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The Ocean Protection Council, California Coastal Commission and State Coastal Conservancy announce the availability of grants to encourage local governments and other entities responsible for planning under the California Coastal Act ([Coastal Act](#)) to develop and adopt updated plans that conserve and protect coastal resources from future impacts from sea-level rise and related climate change impacts such as extreme weather events. The grant application form is available [here in Word 2007 \(docx\) format](#).

There is consensus that the California coast will experience significant impacts from the combined effect of sea-level rise, extreme high tides, storms and coastal erosion in the future. These impacts will play out differently in each region of the coast depending on the shoreline structure, development pattern and many other variables. Understanding, planning for, and preparing for these impacts must be done at the local, regional, and statewide scale. The purpose of these grants is to support this work at local and regional scale, particularly through local coastal planning pursuant to the Coastal Act.

This grant program is focused on updating Local Coastal Programs (LCPs), and other plans authorized under the Coastal Act such as Port Master Plans, Long Range Development Plans and Public Works Plans (other Coastal Act authorized plans) to address sea-level rise and climate change impacts because they are the fundamental planning documents for the California coast.

LCPs are required by the Coastal Act for each coastal jurisdiction, and are the basic planning and regulatory tool that guides development in the coastal zone in conformity with Coastal Act goals and policies. LCPs must specify the kind, location, and intensity of land uses, the applicable resource protection and development policies and implementing ordinances. LCPs are prepared primarily by local governments, and, once certified, govern most coastal permit decisions that can affect the short- and long-term conservation and use of coastal resources. Following adoption by the local planning authority, an LCP is submitted to the Coastal Commission which reviews and certifies as consistent with State law. The Coastal Act also includes requirements related to other authorized plans, such as Port Master Plans, Public Works Plans and University Long Range Development Plans which may involve entities other than the local government.

## **Background**

The National Research Council (NRC) recently released its report [“Sea-level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future”](#) (NRC Report). The NRC Report confirms that California has already experienced sea-level rise and is likely to experience significant increases in sea-level over the next century. The NRC Report also concludes that over the next several decades the most significant impacts will come from the combined effects of sea-level rise and extreme weather events (coastal storms and surges), particularly during El Niño storm cycles and high tides. El Niño events of 1982 and 1997 caused temporary increases in sea-level that combined with storm surges resulted in significant coastal flooding and erosion. Impacts from these kinds of events will likely be amplified as sea-level rises. The NRC Report concludes that sea-level change has enormous implications for coastal planning, land use, and development along the California coast. A 2009 Pacific Institute study, funded in part by the OPC, estimated that without any proactive planning the economic impacts of sea-level rise by 2100 could exceed \$100 billion.

California’s [2009 Climate Adaption Strategy](#) identified the need to support regional and local planning to address sea-level rise impacts, and specifically highlights the importance of updating Local Coastal Programs as a key adaptation strategy. The Coastal and Oceans chapter states that “all coastal jurisdictions, in coordination with the Coastal Commission, should begin to develop amended LCPs that include climate change impacts” (pg 77). The California Natural Resources Agency and California Emergency Management Agency recently released the California Climate [Change Adaptation Policy Guide](#) which emphasizes the importance of starting to plan for climate change impacts immediately and recognizes the critical role of local and regional jurisdictions in this effort.

While a few communities have begun to work on vulnerability assessments, there is a need for assistance to help complete this work. USC Sea Grant conducted a [Coastal California Adaptation Needs Assessment in 2011](#) which found that local communities understand the need to start planning for climate change impacts but lacked the financial resources to complete this work. These grants directly address that need. A December 2012 Local Government workshop held by the Coastal Commission highlighted the need for additional local and technical assistance and Coastal Commission staff resources to assist with the updating of existing LCPs.

The purpose of this grant program is to encourage local governments and other entities responsible for planning under the Coastal Act to develop and adopt updated plans that conserve and protect coastal resources, such as public accessways and recreation sites, environmentally sensitive habitat areas and other coastal and terrestrial resources, agricultural areas, new and existing development, coastal-dependent and visitor-serving uses, critical infrastructure, and other resources and priority uses identified by the Coastal Act from future impacts from sea-level rise and related climate change impacts such as extreme weather events. Priority will be given to planning approaches that emphasize use of natural infrastructure to address climate change impacts.

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### **Submission Dates**

Applications are due July 15, 2013. We expect to award grants in the fall of 2013. Applications must be emailed (or postmarked) by the submission date.

### **Submission Requirements**

Please submit the completed application form, including all attachments, via email to [msmall@scc.ca.gov](mailto:msmall@scc.ca.gov). If you are unable to submit via email, you may mail a cd or hard copy to the Coastal Conservancy:

State Coastal Conservancy  
1330 Broadway, 13<sup>th</sup> Floor  
Oakland, CA 94612

Please note: all information that you submit is subject to the unqualified and unconditional right of the State of California to use, reproduce, publish, or display, free of charge. Please indicate if crediting is requested for any of the photos and/or maps.

### **Grant Amounts**

There are no established minimum or maximum grant amounts. The anticipated award (min-max) is approximately \$50,000 - \$250,000. Approximately ten to fifteen total awards are anticipated over two years. The total anticipated funding for all awards is \$2,500,000. It is expected that there will be two grant rounds, with a second grant round next summer (2014). Awards may be offered for less than an applicant requests.

### **Eligible Applicants**

These grants are intended to provide assistance to local governments responsible for adopting and amending Local Coastal Programs and to other entities with authority for adopting and amending other plans under the Coastal Act (Port Master Plans, Public Works Plans or University Long Range Development Plans) under the Coastal Act. The grant applicant must be one of these entities, but partnership and collaboration is encouraged where appropriate. Partners could include other public agencies, nonprofit organizations, academic researchers, or private contractors.

### **Eligible Projects**

Recognizing that local jurisdictions have different needs for planning for sea-level rise and climate change, there are several types of projects that would be eligible for funding under this grant program. Eligible projects are described below.

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### **1. Assessment of Risks and Vulnerability**

#### **A. Sea-Level Rise Modeling, Mapping, and Science.**

There are significant data sources available to assess the risk posed by sea-level rise or increased storms along the coast, including the recently completed high resolution Coastal LIDAR elevation data and some regional modeling efforts. Some applicants may wish to apply for funds for a more detailed modeling of physical processes to assess risks. In describing proposed risk assessment, applicants should specifically link the proposed work to the hazards identified in their LCP (or other Coastal Act authorized plan) and the Coastal Act and to future amendments that may be needed to LCP policies or ordinances. Modeling, mapping, and science projects could include:

- Integration of existing data sets such as LIDAR and local tidal data
- Modeling dynamic coastal process, such as erosion, flooding, and storm impacts
- Mapping hydrologic connectivity

#### **B. Assessment of Vulnerability to Sea-Level Rise**

A sea-level rise vulnerability assessment for a Local Coastal Program or other plan involves evaluating whether any of the coastal resource topics and community assets addressed in Chapter 3 policies of the Coastal Act are susceptible to harm from impacts that could occur from a range of sea-level rise scenarios. Specifically, the assessment should evaluate how sea-level rise-related hazards (i.e. flooding, inundation, erosion, wave impacts extreme events, and saltwater intrusion, as appropriate) could affect public accessways and recreation sites, environmentally sensitive habitat areas and other coastal and terrestrial resources, agricultural areas, new and existing development, coastal-dependent uses such as harbors and wharfs, critical infrastructure such as wastewater treatment plants, Coastal Highway 1, and other resources and priority uses considered by the Coastal Act.

Using new data and tools, such as the recently completed high resolution Coastal LiDAR, it is now possible to develop maps of areas that may be vulnerable to inundation for different levels of sea-level rise and storm conditions. Understanding the resources at risk due to sea-level rise is the first step in developing adaptation strategies and in identifying needed amendments to LCPs including amendments to the land use plan and implementing ordinances. Types of vulnerability assessment projects could include:

- Assessments of potential vulnerability of natural resources, recreational resources, priority land uses, or built environment to sea-level rise.
- Mapping important resources, such as natural resources, public recreational resources or infrastructure.

### **2. Development of Adaptation Responses**

#### **A. Evaluation of Adaptation Responses**

Communities that have already identified risks and vulnerabilities could apply for funds to evaluate potential planning responses. These activities could include:

- Inventory of existing policies and ordinances that relate to sea-level rise.

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- Identification of options to increase the ability to respond to sea-level rise and storms or to adapt to changing conditions while protecting public access and ecosystem values
- Comparison and evaluation of planning alternatives

### **B. Updates to Local Coastal Programs or Other Coastal Plans**

The ultimate goal of this program is to develop updates to LCPs or other Coastal Act authorized plans to address sea-level rise and other climate change impacts. Potential grantees could apply for funds to develop specific updates to their LCPs or other Coastal Act authorized plans.

- New or amended policies or land use designations
- New or amended implementing ordinances or maps, with consideration for transferrable ordinances that can be shared with other jurisdictions.

## **Ineligible Projects**

Proposals must address at least one certified LCP segment or other defined planning segment such as a certified Port Master Plan or University Long Range Development Plan, as applicable. Proposals related to areas without a certified LCP must demonstrate that the process to complete the LCP is committed to or underway. Proposals that only address a single development project-driven LCP Amendment will not be eligible for this funding.

## **Program Priorities and Selection Criteria**

Staff of the Coastal Commission, Coastal Conservancy and the Ocean Protection Council will work together to review all applications and develop consensus based recommendations for grant awards. The Ocean Protection Council will award grants at a public meeting of the Council.

### **Likelihood of adoption/approval/implementation**

An applicant will need to specifically explain how this grant will support updating of an LCP or other Coastal Act authorized plan to address sea-level rise. The applicant will be asked to describe the complete planning process, steps or mechanisms for coordination with the Coastal Commission, and how this grant would advance that process. Applicants will be asked to provide a detailed timeline for implementation of the project and to identify the specific elements of their LCP that they expect to update through this work. A resolution from the applicant committing to completing an LCP Amendment submittal to the Commission for updating the LCP will be required as part of the application.

### **Public Benefit**

Priority in awarding of grant funds will be given to projects that **maximize public benefits of the coast** (as articulated in the [Coastal Act](#) and [California Ocean Protection Act](#)) when addressing sea-level rise. These benefits can include: preserving and enhancing habitat such as coastal wetlands and natural lands; conserving biodiversity; protecting, providing and enhancing public access; protecting priority land uses such as coastal dependent development and recreational opportunities; and protecting visitor serving amenities. Applications that address sea-level rise using strategies that expand and protect these public resources would be given

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priority. Priority will be given to planning approaches that emphasize use of natural infrastructure to address climate change impacts.

### **Use of Best Available Science**

Applicants should use the best available science on sea-level rise in projects, and should consider the recommendations presented in the [State of California Sea-Level Rise Guidance](#). The current best available science is the NRC Report on sea-level rise. Preliminary analysis of potential impacts from sea-level rise using the NOAA Coastal Services Center [Sea-Level Rise and Coastal Flooding Impacts Viewer](#) or other readily available planning tools will be required as part of the application. In addition, applicants are asked to consider the ranges and recommendations presented in the State of California Sea-Level Rise Guidance.

### **Effectiveness**

The goal of these grants is to encourage local entities to conserve and protect coastal resources, such as public accessways and recreation sites, environmentally sensitive habitat areas and other coastal and terrestrial resources, agricultural areas, new and existing development, coastal-dependent and visitor-serving uses, critical infrastructure, and other resources and priority uses identified by the Coastal Act from future impacts from sea-level rise and related climate change impacts through changes in LCPs or other applicable plans. Applicants will be asked to demonstrate how the proposed project will be effective in conserving and protecting these resources, and how the proposed project builds upon or complements existing efforts that may be underway or completed for their local jurisdiction. Priority will be given to planning approaches that emphasize use of natural infrastructure to address climate change impacts.

### **Urgency and Need**

Priority will be given to applications that address an urgent problem. Urgency may be demonstrated by the specific resources that are at risk from sea-level rise and climate change. Urgency could also arise if the applicant is going to make planning decisions that will have long term effects on its ability to adapt to sea-level rise and other climate change impacts. Applicants will need to demonstrate the need for this grant.

### **Transferability**

Projects that address issues in a manner that may be useful as a model for other communities will be given priority. The potential transferability of analysis, strategies, or draft ordinance language will be considered in evaluation of proposals. Grantees will be expected to report on lessons learned during the grant's planning process and to include in the work program specific activities to actively share information with others, including other local governments. Grantees should propose specific means for evaluating success and sharing lessons learned. Grantees will be required to provide any geospatial data developed as part of this project to the California Coastal Geoportal.

### **Matching Funds/Leverage**

Applicants are encouraged to provide matching funds or leverage resources. Applicants will need to demonstrate their capacity to achieve the proposed work, including identifying key staff and other resources that will be committed to the project. Grant amounts will be limited and preference will be given to communities that can leverage other resources, provide matching

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funds or commit significant in-kind resources to the project. The matching funds criteria may be waived for communities that demonstrate hardship.

### **Grant Administration**

Grant awards are subject to the approval of the Ocean Protection Council. Grants will be administered by the State Coastal Conservancy in coordination with the Coastal Commission and Ocean Protection Council.

If you have questions about this grant program, please email Mary Small, [msmall@scc.ca.gov](mailto:msmall@scc.ca.gov)